# S. 617

## IN THE HOUSE OF REPRESENTATIVES

August 5, 1994

Referred jointly to the Committees on Natural Resources, Science, Space, and Technology, and Public Works and Transportation

## AN ACT

To authorize research into the desalinization of water and water reuse and to authorize a program for States, cities, or any qualifying agency which desires to own and operate a desalinization or water reuse facility to develop such facilities.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,
- 3 **SECTION 1. SHORT TITLE.**
- 4 This Act may be cited as the "Desalinization Re-
- 5 search and Development Act of 1994".

## 1 SEC. 2. DECLARATION OF POLICY.

2 In view of the increasing shortage of usable surface 3 and ground water in many parts of the United States and the world, it is the policy of the United States to perform 5 research to develop low-cost alternatives in the desalinization and reuse of saline or biologically impaired water to provide water of a quality suitable for environmental enhancement, agricultural, industrial, municipal, and other 9 beneficial consumptive or nonconsumptive uses, and to provide, through cooperative activities with local sponsors, desalinization and water reuse processes or facilities which provide proof-of-concept demonstrations of advanced technologies for the purpose of developing and conserving the 13

## 5 SEC. 3. DEFINITIONS.

- 16 As used in this Act—
- 17 (1) the term "desalinization" means the use of 18 any process or technique for the removal and, when 19 feasible, adaptation to beneficial use, of organic and 20 inorganic elements and compounds from saline or 21 biologically impaired waters, by itself or in conjunc-22 tion with other processes;

water resources of this Nation and the world.

(2) the term "saline water" means sea water, brackish water, and other mineralized or chemically impaired water;

23

24

- 1 (3) the term "United States" means the States
  2 of the United States, the District of Columbia, the
  3 Commonwealth of Puerto Rico, and the territories
  4 and possessions of the United States;
  - (4) the term "usable water" means water of a high quality suitable for environmental enhancement, agricultural, industrial, municipal, and other beneficial consumptive or nonconsumptive uses; and
- 9 (5) the term "sponsor" means any local, State, 10 or interstate agency responsible for the sale and de-11 livery of usable water that has the legal and finan-12 cial authority and capability to provide the financial 13 and real property requirements needed for a desalin-14 ization facility.

## 15 SEC. 4. RESPONSIBILITY FOR THE PROGRAM.

- 16 (a) RESEARCH AND DEVELOPMENT.—The Secretary 17 of the Interior shall have primary program management 18 and oversight for conduct of the research and development 19 under this Act and shall coordinate these activities with 20 the Secretary of the Army.
- 21 (b) Desalinization Development Program.—
- 22 The Secretary of the Interior shall jointly execute the De-
- 23 salinization Development Program established under sec-
- 24 tion 6 with the Secretary of the Army.

6

7

## 1 SEC. 5. RESEARCH AND DEVELOPMENT.

2	(a) IN GENERAL.—In order to gain basic knowledge
3	concerning the most efficient means by which usable water
4	can be produced from saline water, the Secretary of the
5	Interior and the Secretary of the Army shall conduct a
6	basic research and development program as established by
7	this Act.
8	(b) CONTENTS OF PROGRAM.—For the basic research
9	and development program, the Secretary of the Interior
10	and the Secretary of the Army shall—
11	(1) conduct, encourage, and promote fundamen-
12	tal scientific research and basic studies to develop
13	the best and most economical processes and methods
14	for converting saline water into usable water
15	through research grants and contracts—
16	(A) to conduct research and technical de-
17	velopment work,
18	(B) to make studies in order to ascertain
19	the optimum mix of investment and operating
20	costs,
21	(C) to determine the best designs for dif-
22	ferent conditions of operation, and
23	(D) to investigate increasing the economic
24	efficiency of desalinization processes by using
25	them as dual-purpose co-facilities with other
26	processes involving the use of water;

- 1 (2) engage, by competitive or noncompetitive 2 contract or any other means, necessary personnel, 3 industrial or engineering firms, Federal laboratories 4 and other facilities, and educational institutions suit-5 able to conduct research or other work;
  - (3) study methods for the recovery of byproducts resulting from the desalinization of water to offset the costs of treatment and to reduce the environmental impact from those byproducts; and
- 10 (4) prepare a management plan for conduct of 11 the research and development program established 12 under this section.

## 13 SEC. 6. DESALINIZATION DEVELOPMENT PROGRAM.

- 14 (a) Program Responsibility.—The Secretary of
- 15 the Interior shall have program responsibility for the De-
- 16 salinization Development Program established under this
- 17 section (referred to in this section as the "Desalinization
- 18 Development Program").

6

7

8

- 19 (b) Design and Construction.—The Secretary of
- 20 the Army and the Secretary of the Interior both shall have
- 21 authority to design and construct facilities under the De-
- 22 salinization Development Program.
- 23 (c) Selection of Desalinization Development
- 24 FACILITIES.—Candidate facilities shall be submitted by
- 25 the sponsor directly to the Secretary of the Army or the

Secretary of the Interior. Sponsors shall submit their application for the design and construction of a facility and certification that they can provide the required cost sharing. Facilities shall be selected subject to availability of Federal funds. 6 (d) Cost Sharing.— 7 (1) Initial cost.—The initial cost of a facility 8 shall include— (A) design cost, 9 (B) construction cost, 10 11 (C) lands, easements, and rights-of-way 12 costs, and 13 (D) relocation costs. (2) GENERAL RULE.—The sponsor for a facility 14 15 under the Desalinization Development Program shall 16 pay, during construction, at least 25 percent of the 17 initial cost of the facility, including providing all 18 lands, easements, and rights-of-way and performing 19 all related necessary relocations. (3) 25-PERCENT MINIMUM CONTRIBUTION.—If 20 the value of the contributions required under para-21 22 graph (2) of this subsection is less than 25 percent of the initial cost of the facility, the sponsor shall 23

pay during construction of the facility such addi-

tional amounts as are necessary so that the total

24

1	contribution of the sponsor is equal to 25 percent of
2	the initial cost of the facility.
3	(4) 50-PERCENT MAXIMUM.—The sponsor share
4	under paragraph (2) shall not exceed 50 percent of
5	the initial cost of the facility.
6	(e) MAXIMUM INITIAL COST.—The initial cost of a
7	facility under subsection (d)(1) may not exceed
8	\$10,000,000.
9	(f) Operation and Maintenance.—Operation,
10	maintenance, repair, and rehabilitation of facilities shall
11	be the responsibility of the sponsor.
12	(g) REVENUE.—All revenue generated from the sale
13	of usable water from the facilities shall be retained by the
14	sponsors.
15	SEC. 7. PARTICIPATION BY INTERESTED AGENCIES AND
16	OTHER PERSONS.
17	(a) Coordination With Other Agencies.—
18	(1) IN GENERAL.—Research and development
19	activities undertaken by the Secretary of the Interior
20	under this Act shall be coordinated or conducted
21	jointly, as appropriate—
22	(A) with the Department of Commerce,
23	specifically with respect to marketing and inter-
24	national competition, and
25	(B) with—

1	(i) the Departments of Defense, Agri-
2	culture, State, Health and Human Serv-
3	ices, and Energy,
4	(ii) the Environmental Protection
5	Agency,
6	(iii) the Agency for International De-
7	velopment, and
8	(iv) other concerned Government and
9	private entities.
10	(2) OTHER AGENCIES.—Other interested agen-
11	cies may furnish appropriate resources to the Sec-
12	retary of the Interior to further the activities in
13	which they are interested.
14	(b) Availability of Research.—All research
15	sponsored or funded under authority of this Act shall be
16	provided in such manner that information, products, proc-
17	esses, and other developments resulting from Federal ex-
18	penditures or authorities shall (with exceptions necessary
19	for national defense and the protection of patent rights)
20	be available to the general public consistent with this Act.
21	(c) Relationship to Antitrust Laws.—Section
22	10 of the Federal Nonnuclear Energy Research and Devel-
23	opment Act of 1974 (42 U.S.C. 5909) shall apply to the
24	activities of individuals, corporations, and other business

organizations in connection with grants and contracts made by the Secretary of the Interior pursuant to this Act. SEC. 8. TECHNICAL AND ADMINISTRATIVE ASSISTANCE. 3 4 The Secretary of the Interior is authorized to accept technical and administrative assistance from a State, public, or private agency in connection with research and development activities relating to desalinization of water and 8 may enter into contracts or agreements stating the purpose for which the assistance is contributed and, in appropriate circumstances, providing for the sharing of costs between the Secretary of the Interior and such agency. SEC. 9. MISCELLANEOUS AUTHORITIES. 13 In carrying out this Act, the Secretary of the Interior or the Secretary of the Army, as appropriate, may— 14 (1) make grants to educational and scientific 15 16 institutions: 17 (2) contract with educational and scientific in-18 stitutions and engineering and industrial firms; 19 (3) engage, by competition or noncompetitive 20 contract or any other means, necessary personnel, industrial and engineering firms and educational in-21 22 stitutions; (4) use the facilities and personnel of Federal, 23

State, municipal, and private scientific laboratories;

- 1 (5) contract for or establish and operate facili-2 ties and tests to conduct research, testing, and de-3 velopment necessary for the purposes of this Act;
  - (6) acquire processes, data, inventions, patent applications, patents, licenses, lands, interests in lands and water, facilities, and other property by purchase, license, lease, or donation;
  - (7) assemble and maintain domestic and foreign scientific literature and issue pertinent bibliographical data;
  - (8) conduct inspections and evaluations of domestic and foreign facilities and cooperate and participate in their development;
  - (9) conduct and participate in regional, national, and international conferences relating to the desalinization of water;
  - (10) coordinate, correlate, and publish information which will advance the development of the desalinization of water; and
  - (11) cooperate with Federal, State, and municipal departments, agencies and instrumentalities, and with private persons, firms, educational institutions, and other organizations, including foreign governments, departments, agencies, companies, and in-

- strumentalities, in effectuating the purposes of this
- 2 Act.

## 3 SEC. 10. DESALINIZATION CONFERENCE.

- 4 (a) Establishment.—The President shall instruct
- 5 the Agency for International Development to sponsor an
- 6 international desalinization conference within twelve
- 7 months following the date of the enactment of this Act.
- 8 Participants in such conference should include scientists,
- 9 private industry experts, desalinization experts and opera-
- 10 tors, government officials from the nations that use and
- 11 conduct research on desalinization, and those from nations
- 12 that could benefit from low-cost desalinization technology,
- 13 particularly in the developing world, and international fi-
- 14 nancial institutions.
- 15 (b) Purpose.—The conference established in sub-
- 16 section (a) shall explore promising new technologies and
- 17 methods to make affordable desalinization a reality in the
- 18 near term, and shall further propose a research agenda
- 19 and a plan of action to guide longer-term development of
- 20 practical desalinization applications.
- 21 (c) Funding for the international desa-
- 22 linization conference may come from operating or program
- 23 funds of the Agency for International Development. The
- 24 Agency for International Development shall encourage fi-
- 25 nancial and other support from other nations, including

- 1 those that have desalinization technology and those that
- 2 might benefit from it.

## **3 SEC. 11. REPORTS.**

- 4 Prior to the expiration of the twelve-month period fol-
- 5 lowing the date of enactment of this Act, and each twelve-
- 6 month period thereafter, the Secretary of the Interior, in
- 7 consultation with the Secretary of the Army, shall prepare
- 8 a report to the President and Congress concerning the ad-
- 9 ministration of this Act. Such report shall include the ac-
- 10 tions taken by the Secretary of the Interior and the Sec-
- 11 retary of the Army during the calendar year preceding the
- 12 calendar year in which such report is filed, and shall in-
- 13 clude actions planned for the next following calendar year.

#### 14 SEC. 12. AUTHORIZATION OF APPROPRIATIONS.

- 15 (a) RESEARCH AND DEVELOPMENT.—There are au-
- 16 thorized to be appropriated to carry out section 5
- 17 \$5,000,000 for fiscal year 1995, \$10,000,000 for fiscal
- 18 year 1996, and such sums as may be necessary for each
- 19 of fiscal years 1997 through 1999.
- 20 (b) Desalinization Development Program.—
- 21 There are authorized to be appropriated to carry out sec-
- 22 tion 6 such sums as may be necessary, up to a total of
- 23 \$50,000,000, for fiscal years 1995 through 1999. Funds
- 24 made available under this subsection shall be made avail-
- 25 able in equal amounts to the Department of the Interior

- 1 and the civil works program of the Army Corps of Engi-
- 2 neers.

Passed the Senate August 4 (legislative day, July 20), 1994.

Attest:

MARTHA S. POPE,

Secretary.